Australian Bureau of Meteorology (AA774707, AA779807), Maritime Safety Queensland Notice 595/2014 (AA776183)

Chapter 9 - Maritime Safety Information Services

AUSTRALIA - Product - Amendment to Seafarers Handbook for Australian Waters AHP20

Chapter 12 - Queensland Ports

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Weipa port table page 213 accompanying block

To accompany Australian Notice to Mariners 1157/2014

Satellite	Forecast type	Areas	Times (UTC)
Pacific Ocean Region	High Seas	North Eastern, South Eastern, Western, Northern	1100, 2300
Pacific Ocean Region	Coastal Waters	Bass Strait, Northern Territory (Cape Fourcroy to NT - QLD border)	0700 ¹ , 1910 ¹ 2015, 0815
Indian Ocean Region	High Seas	Western	1030, 2330
Indian Ocean Region	Coastal Waters	Western Australia , Northern Territory (WA-NT border to Cape Fourcroy)	2030, 0830

Note: 1. One hour earlier during Australian Eastern Daylight saving Time - see Chapter 1 - Time Zones.

9.2.4 Weapons Practice Warnings

- Details of Military Practice Areas procedures are outlined in Ch.8.
- 2. Limits and coordinates of Restricted and Dangerous Areas are published in Australian Annual Notices to Mariners No 9.
- 3. As clear range procedures are conducted by range managers, no broadcast warnings will be issued in respect of weapons firing practices in the areas depicted in Notices to Mariners No 9.
- 4. Major exercises will be the subject of special warnings. Vessels approaching weapons practice areas are requested to maintain a radio listening watch (see Ch.11 – Military Information).

9.2.5 Notices to Mariners

 Up-to-date and navigationally critical information is published in the Australian Notices to Mariners (NtM), which is used to maintain nautical charts and publications (see Ch.13).

9.3 Maritime Safety Information Service

- network of radio broadcasts containing information which is necessary for safe navigation. Two systems are used to broadcast MSI. Ships must be able to receive the MSI broadcasts for the area in which they are operating. These requirements are set out in the *International Convention for the Safety of Life at Sea* (SOLAS) 1974.
- GMDSS supports the receipt of MSI by:
 - The international NAVTEX service MF transmissions in coastal areas (but not provided in Australia)

- The International SafetyNET service Inmarsat C transmissions which cover all the waters of the globe, with the exception of Polar Regions.
- Although there is some duplication to allow a vessel to change from one system to another, the majority of messages will only be broadcast on one system. Australia has indicated that coastal and high seas MSI will be broadcast via SafetyNET. NAVTEX is a coastal MF broadcast system and is not appropriate for use in GMDSS Area A3.
- In Australia, in addition to Inmarsat C SafetyNET, MSI is broadcast by two other radio systems, via:
 - HF Maritime Communications Stations
 - HF and VHF Coastal Radio Stations (Limited and Volunteer).

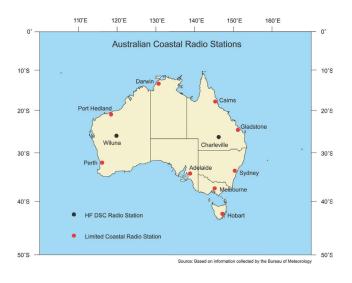
9.3.1 Maritime Communications Stations

- Maritime Communications Stations provide:
 - search and rescue services in conjunction with RCC Australia
 - automatic weather forecasts for the high seas and coastal waters
 - a continuous automated watch for HF DSC distress, urgency and safety calls.
- RCC Australia transmits MSI via SafetyNET on Inmarsat C. The BOM transmits weather related MSI via MF/HF radiofacsimile, HF radiotelephony and Inmarsat C (SafetyNET).

9.3.2 Limited Coastal Radio Stations

- Limited Coastal Radio Stations provide:
 - safety communications services for small craft
 - · twice daily navigation warnings
 - urgent navigation warnings as required.
- There are 9 Government administered, Limited Coast Radio Stations which continuously monitor the HF voice channels on 4125, 6215 and 8 291 kHz for distress and safety, and broadcast navigation warnings. Charleville Radio also monitors 12290 kHz from 0730-1930 EST (0700-1900 CST). Navigation warnings are broadcast on 8176 kHz. They also conduct a listening watch on marine VHF Channels 16 and 67 (see table below).
- Volunteer Coast Radio Stations are run by bodies such as volunteer marine rescue services and clubs. They operate mainly on VHF and 27 MHz with some also monitoring 2182 kHz and some HF frequencies. Transmission times can vary. Further information can be obtained from the Australian Volunteer Coast Guard Association website.





9.3.3 NAVTEX

 Due to Australia's long coastline and the limited range of NAVTEX, Australia does not operate a NAVTEX service. A complete list of NAVTEX stations can be found in Admiralty List of Radio Signals (ALRS) Volumes 3 and 5.

Limited Coastal Radio Station	Callsign	Navigation warnings	Broadcast Time	Further Information
Adelaide	Charleville Radio (formerly "Coast Radio Adelaide")	8176 kHz	1255, 1655 CST	www.transport.sa.gov.au
Cairns	Coast Radio Cairns	8176 kHz	0925, 2225 EST	www.msq.qld.gov.au
Darwin	Coast Radio Darwin	8176 kHz	1055, 1855 CST	www.nt.gov.au
Gladstone	Coast Radio Gladstone	8176 kHz	0825, 2125 EST	www.msq.qld.gov.au
Hobart	Coast Radio Hobart	8176 kHz	1525 EST	www.mast.tas.gov.au
Melbourne	Charleville Radio (formerly "Coast Radio Melbourne")	8176 kHz	0725, 1225 EST	www.marinesafety.vic.gov.au
Perth	Coast Radio Perth	8176 kHz	1425, 1825 WST	www.transport.wa.gov.au
Port Hedland	Coast Radio Port Hedland	8176 kHz	1225, 1625 WST	www.transport.wa.gov.au
Sydney	Charleville Radio (formerly "Coast Radio Sydney")	8176 kHz	1025, 2325 EST	www.maritime.nsw.gov.au

9.3.4 SafetyNET

- SafetyNET is an international safety service, which allows authorised MSI providers, such as meteorological offices, hydrographic offices and RCC's to broadcast messages to all ships in certain geographical areas.
- 2. The SafetyNET service is available through the Inmarsat C system. This system has a special capability known as Enhanced Group Calling (EGC), which enables authorised information providers to broadcast messages to selected groups of ships.
- a. To receive scheduled navigational warnings for a particular area the terminal must be logged into the correct ocean region Network Coordination Station. The terminal must be programmed with the vessel's current location and the NAVAREA (not stations) and message types that are required. Australia is in NAVAREA X. Coastal areas A to H are used around the Australian mainland. Once the terminal is programmed, the service is automatic and is free of charge.
- Information issued by RCC Australia and the BOM are promulgated using SafetyNET via the POR and IOR satellites. NAVAREA X and AUSCOAST warnings are issued immediately on receipt of the information, and then repeated at the scheduled times of 0700 and 1900 UTC. A scheduled broadcast may not occur at precisely these times, so it is recommended that the terminal remains correctly configured until at least 40 minutes after the scheduled time. Full details of the SafetyNET service can be found in *ALRS Volume 5*.

9.4 Meteorological Broadcasts

1. The BOM provides meteorological forecasts, warnings and observations and these are transmitted to mariners by various means, including HF voice and facsimile, VHF voice, telephone voice and facsimile, Inmarsat C and through media outlets. Marine Weather information can be found on the Bureau's website.

Website: www.bom.gov.au

9.4.1 Marine Radio - Voice

The BOM broadcasts marine weather radio services for high seas and Australian coastal waters from the two HF transmitters located at Charleville, Queensland (call sign VMC "Australian Weather East") and at Wiluna, Western Australia (call sign VMW "Australian Weather West"). Voice services provide bulletins of warnings (repeated every hour) and forecasts (repeated every 4 hours). The full voice schedule is available at the following website.

Website: www.bom.gov.au/marine

Charleville (VMC) broadcast schedule

- 2. Marine weather warnings are broadcast on the hour (on the half-hour in CST) for Qld, NSW, Vic and Tas coastal waters zones and for Northern, Northeast and Southeast high seas areas. The broadcast is available on the following frequencies (kHz):
 - Day-time (0700 1800 EST): 4426, 8176, 12365, 16546
 - Night-time (1800 0700 EST): 2201, 6507, 8176, 12365
- 3. Navigation Maritime Safety Information notices are broadcast at 25 past each hour.
- 4. Marine forecasts and observations are broadcast from Charleville (VMC) on a four hour repeat cycle according to the following schedule.

Wiluna (VMW) broadcast schedule

- Marine weather warnings are broadcast on the hour (on the half-hour in CST) for Qld Gulf, NT, WA and SA coastal waters zones and for Northern and Western high seas areas. The broadcast is available on the following frequencies (kHz):
 - Day-time (0700 1800 WST): 4149, 8113, 12362, 16528
 - Night-time (1800 0700 WST): 2056, 6230, 8113, 12362
- 6. Navigation Maritime Safety Information notices are broadcast at 25 past each hour.
- 7. Marine forecasts and observations are broadcast from Wiluna (VMW) on a four hour repeat cycle according to the following schedule.

To accompany Australian Notice to Mariners 1157/2014

Charleville Broadcast Time		Frequencies (kHz)	Forecasts		
EST*	CST*	WST	UTC	4426	
0730	0700	0530	2130	8176	Queensland
0830	0800	0630	2230	12365	High Seas (Northern, NE and SE areas)
0930	0900	0730	2330	16546	New South Wales & Victoria
1030	1000	0830	0030		Tasmania
1130	1100	0930	0130		Queensland
1230	1200	1030	0230		High Seas (Northern, NE and SE areas)
1330	1300	1130	0330		New South Wales & Victoria
1430	1400	1230	0430		Tasmania
1530	1500	1330	0530		Queensland
1630	1600	1430	0630		High Seas (Northern, NE and SE areas)
1730	1700	1530	0730		New South Wales & Victoria
1830	1800	1630	0830	2201	Tasmania
1930	1900	1730	0930	6507	Queensland
2030	2000	1830	1030	8176	High Seas (Northern, NE and SE areas)
2130	2100	1930	1130	12365	New South Wales & Victoria
2230	2200	2030	1230		Tasmania
2330	2300	2130	1330		Queensland
0030	0000	2230	1430		High Seas (Northern, NE and SE areas)
0130	0100	2330	1530		New South Wales & Victoria
0230	0200	0030	1630		Tasmania
0330	0300	0130	1730		Queensland
0430	0400	0230	1830		High Seas (Northern, NE and SE areas)
0530	0500	0330	1930		New South Wales & Victoria
0630	0600	0430	2030		Tasmania

^{*} During daylight saving time, add 1hour to EST and CST to obtain AEDT and ACDT equivalent

Wiluna Broadcast Time		Fraguencies (kl.lz)	Forecasts		
WST	CST*	EST*	UTC	Frequencies (kHz)	Forecasts
0730	0900	0930	2330	4149	Western Australia (north of NW Cape) Northern Territory
0830	1000	1030	0030	8113	Western Australia (south of NW Cape)
0930	1100	1130	0130	12362	South Australia
1030	1200	1230	0230	16528	Queensland (Gulf waters)
1130	1300	1330	0330		Western Australia (north of NW Cape) Northern Territory
1230	1400	1430	0430		Western Australia (south of NW Cape)
1330	1500	1530	0530		South Australia
1430	1600	1630	0630		Queensland (Gulf waters) High Seas (Northern and Western areas)
1530	1700	1730	0730		Western Australia (north of NW Cape) Northern Territory
1630	1800	1830	0830		Western Australia (south of NW Cape)
1730	1900	1930	0930		South Australia
1830	2000	2030	1030	2056	Queensland (Gulf waters) High Seas (Northern and Western areas)
1930	2100	2130	1130	6230	Western Australia (north of NW Cape) Northern Territory
2030	2200	2230	1230	8113	Western Australia (south of NW Cape)
2130	2300	2330	1330	12362	South Australia
2230	0000	0030	1430		Queensland (Gulf waters) High Seas (Northern and Western areas)
2330	0100	0130	1530		Western Australia (north of NW Cape) Northern Territory
0030	0200	0230	1630		Western Australia (south of NW Cape)
0130	0300	0330	1730		South Australia
0230	0400	0430	1830		Queensland (Gulf waters) High Seas (Northern and Western areas)
0330	0500	0530	1930		Western Australia (north of NW Cape) Northern Territory
0430	0600	0630	2030		Western Australia (south of NW Cape)
0530	0700	0730	2130		South Australia
0630	0800	0830	2230		Queensland (Gulf waters) High Seas (Northern and Western areas)

^{*} During daylight saving time, add 1hour to EST and CST to obtain AEDT and ACDT equivalent

To accompany Australian Notice to Mariners 1157/2014



9.4.2 Forecasts

Routine Coastal Waters Forecasts

 Routine coastal waters forecasts and observation reports are for areas within 60 nautical miles of the coast. They are generally issued twice a day with updates at other times if weather conditions change significantly from those forecasts. The BOM provides forecasts up to 4 days ahead.

High Seas Forecasts

2. Routine High Seas Forecasts are issued twice daily for surrounding Australia and extending from the coastline. The Australian High Seas Areas have been defined in the diagram below.

9.4.3 Warnings

Warnings are issued by the BOM under the following categories:

Warning Category	Wind Strength
Strong Wind Warning:	26 - 33 knots
Gale Warning:	34 - 47 knots
Storm Force Wind Warning:	48 - 63 knots
Hurricane Force Wind Warning:	>64 knots

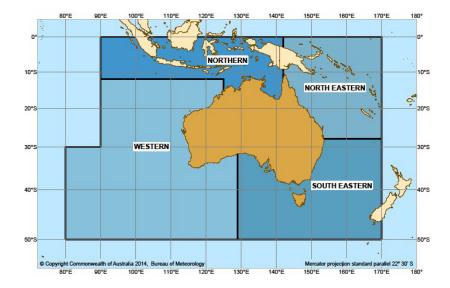
Warnings for Coastal Waters

2. Warnings for Coastal Waters are issued whenever strong winds, gales, storm force or hurricane force winds are expected. The initial warning attempts to provide a 24 hour lead time and warnings are renewed every 6 hours.

Station	Coastal Waters Areas	Broadcast Times
VMC:	QLD, NSW, VIC, TAS, SA, NT	Every hour commencing 0000 EST
VMV:	QLD Gulf, NT,	Every hour commencing
	WA, SA	0000 WST

To accompany Australian Notice to Mariners 1157/2014

Australian High Seas Areas



Warnings for the High Seas

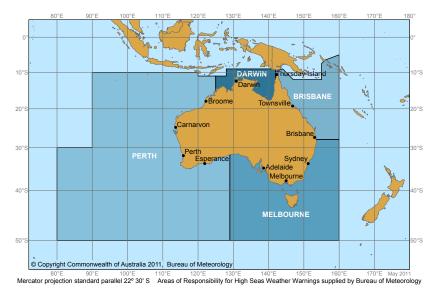
- Warnings to shipping on the high seas are issued whenever gale, storm or hurricane force winds are expected. The initial warning attempts to provide a 24 hour lead time and warnings are renewed every 6 hours. Australia is responsible for issuing gale and storm warnings in the areas shown in the diagram below.
- 4. Ocean warnings for the North, North Eastern and South Eastern areas of METAREA X are broadcast from VMC every hour on the hour (EST). Ocean warnings for the Western, Northern and South East areas of METAREA X are broadcast from VMW every hour on the hour (WST).

Station	High Seas Areas	Broadcast
VMC:	Northern	Every hour on the
	North Eastern	hour EST
	South Eastern	
VMW:	Western	Every hour on the
	Northern	hour WST
	South Eastern	

5. More information on warnings for the high seas can be found on the BOM website.

Website: www.bom.gov.au/marine	Website:	www.bom.gov.au/marine
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Areas of Responsibility for High Sea



To accompany Australian Notice to Mariners 1157/2014

9.4.4 Tropical Cyclone Warnings

- Australia is responsible for issuing Tropical Cyclones Warnings in the areas shown in the diagram below.
- For current tropical cyclone warning information visit the BOM website.

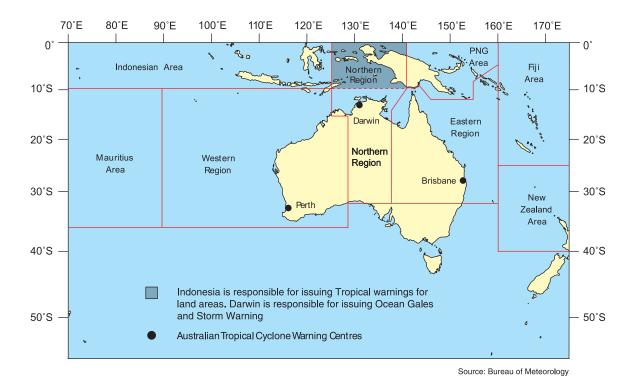
Cyclone Warning Services	www.bom.gov.au/cyclone
and warnings:	www.bom.gov.au/cyclone

3. Tropical cyclones are defined when, among other factors, wind speeds equal to or greater than 34 knots are expected. Each tropical cyclone is assigned a distinctive name which it retains throughout its existence. Tropical cyclones vary in both size and intensity. Tropical cyclones are

- allocated a category which provides an indication of the strength of the strongest wind associated with the system. Categories range from '1' for a cyclone with gale force winds, through to '3' for cyclones with winds to hurricane force, to '5' for the very strongest cyclones (see Ch.4).
- 4. The severity category relates to Tropical Cyclone Warnings issued for coastal communities and emergency services that may be affected by the cyclone.
- 5. A gale, storm force or hurricane force wind warning is issued to shipping immediately upon indication that a tropical cyclone is developing.
- 6. Severity categories are not normally used in Tropical Cyclone Warnings for the High Seas (see severity category table below).

Severity Category	Beaufort	Average winds in knots (ten minute averages)	Approximate maximum wind gusts in knots
1	Gale	34 to 47	50 to 65
2	Storm Force	48 to 63	65 to 90
3	Hurricane Force	64 to 85	90 to 120
4	Hurricane Force	86 to 106	120 to 150
5	Hurricane Force	More than 106	More than 150

Tropical cyclone warning areas



To accompany Australian Notice to Mariners 1157/2014

Weipa, QLD (12° 40'S, 141° 50'E)		
UN/LOCODE: AU WEI		
Chart:	Aus 4	
Security Regulated Port:	Yes	
Port Authority:	North Queensland Bulk Ports Corporation	
Website:	www.nqbp.com.au	
email:	info@nqbp.com.au	
Telephone:	+61 7 4955 8155	
Harbour Control (VTS) call:	Weipa VTS	
Telephone:	+61 7 4052 7470	
Fax:	+61 7 4052 7460	
email:	vtscairns@msq.qld.gov.au	
Pilotage:	Compulsory	
Pilot		
Telephone (office hours):	+61 7 4069 7170	
Telephone (AOH):	+61 7 4069 9497	
Ordering:	48 hours (contact VTS)	
Pilot Boarding Grounds	12° 43.90'S, 141° 36.00'E	
Small vessels <100 LOA	12° 40.45'S, 141° 43.33'E	
Communication	"Weipa VTS"	
Call up, emergencies:	VHF Ch 16	
Port Operations VTS:	VHF Ch 06, 08	
Tugs:	VHF Ch 06, 08	
Working Channel	VHF Ch 12	
Notice of ETA:	48 hours	
For more information:	www.msq.qld.gov.au/Shipping/Port-	
	procedures/Port-procedures-weipa.aspx	

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